

Work Order ID 141766

Thursday, February 11, 2016 10:24:03 AM

141766

Page 1

Item ID: D3188-6 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Spacepod Body
Start Date: 2/11/2016 Start Qty: 1.00 ***1*** Cust Item ID:
Required Date: 2/18/2016 Req'd Qty: 1.00 ***1*** Customer:
Reference:

Approvals: Process Plan: MLJ Date: FEB 11 2016 Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3188	Rev G								
100	QC6- Inspect dimensions to drawing	0.00							DAS 16 9-89
100									
QC	Memo	0.00							10/10/15
Quality Control	Check for void spot and pins.								
110	Identify as per dwg & Stock Location: _____	0.00							
110									
Packaging	Memo	0.00							DAS 6 9-89
Packaging	Location : CA2 <u>SL</u>								OCT 12 2016
120	QC21- Final Inspection - Work Order Release	0.00							
120									DAS 21 9-89
QC	Memo	0.00							OCT 13 2016
Quality Control									

DAS
21
9-89

OCT 13 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																													
Date :		Step #:		QTY Effective :				MRB (QS1042) Approval																																																									
Description Work Order Deviation				Disposition				Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval																																																									
Root Cause		FAULT CATEGORY																																																															
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐	Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐	Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐	Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐	Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐	Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐	Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐	Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐	LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐	Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐	Past Expiry Date ☐	Manufacturing Process ☐	OTHER : ☐			
Misidentified ☐	Past Due ☐																																																																

Picklist Print

Thursday, February 11, 2016 10:24:07 AM

Page 1

Work Order ID: 141766

141766

Parent Item: D3188-6

D3188-6

Parent Item Name: Spacepod Body

Start Date: 2/11/2016

Required Date: 2/18/2016

Start Qty: 1.00

Required Qty: 1.00

Comments: IPP Rev:A 09-02-05 New Issue DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3188-2P

Purchased

No

100

Each

0.0000

1

1

D3188-2P

Spacepod Body

13137538

DAS

16

9-89

16/10/02

D3188-2M

DAS
10
9-89

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
		OTHER : ☐							

GENERAL NOTES:

1) MATERIALS:

RESIN: EPOCAST 50-A/9816 OR DERA KANE 470-36/411/510A40

FIBER: 9.7 oz 7781 WEAVE "S" GLASS (9 oz SATIN)
12 oz UNIDIRECTIONAL FIBERGLASS ("12 oz UNIDIRECTIONAL")
18 oz ROVING "E" GLASS (18 oz CLOTH)
OWENS CORNING MILLED FIBERS, "E" GLASS
3M K20 GLASS BUBBLES

FOAM: A500 CORE CELL
OR DIVINYCELL
OR AIREX
OR KLEGECELL
FILL VOIDS IN FOAM WITH PASTE MADE FROM MILLED FIBERS & RESIN

1. MOLD SCHEDULE:

PART	LAYUP	TRIM AND DRILL
D3188-1M/-1/-5	DT8003	DT8501
D3188-2M/-2/-6	DT8004	DT8502
D3188-3M/-3/-7	DT8500	DT8501

2) FINISH: INSIDE/OUTSIDE WITH GREY DUPONT HIGHBUILD PRIMER 1144-S.
APPLY ANTI-SKID PAINT TO TOP SURFACE OF PODS PER QSI 005 4.4

3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED

4) UNITS: INCHES UNLESS OTHERWISE NOTED

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

6) IDENTIFICATION: NONE

7) WEIGHT: D3188-1 = N/A
D3188-2 = N/A
D3188-3 = N/A
D3188-5 = N/A
D3188-6 = N/A
D3188-7 = N/A

8) REFERENCE DIMENSIONS MATCH AIRCRAFT CONTOUR AND DOOR OPENING

9) LAMINATE PER DART QSI 006. LAMINATION SCHEDULE PER THIS DRAWING

10) POT INSERTS PER QSI 006 SECTION 4.16

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SUBJECT TO AMENDMENT

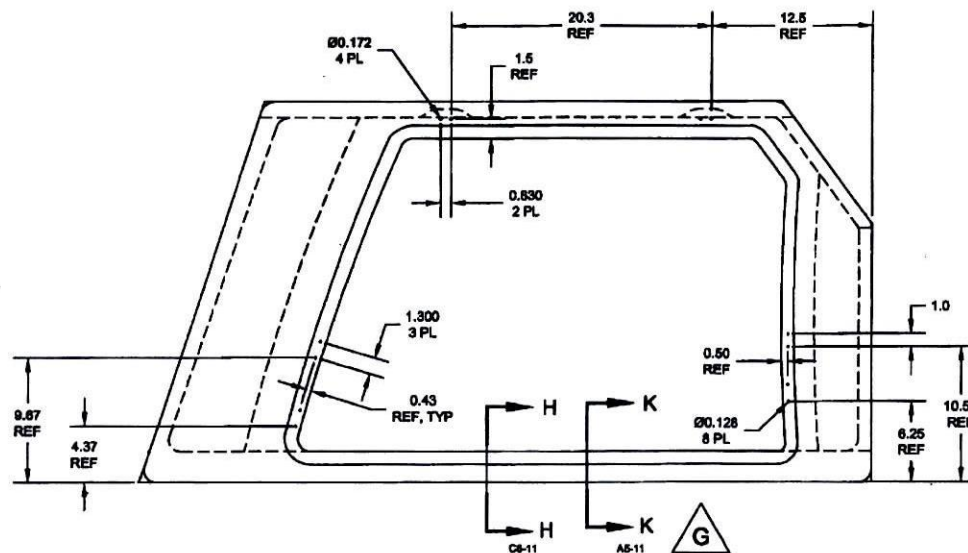
WITHOUT NOTICE
WORK ORDER

NO. 141764 MWS

1602-11

RELEASED
2014-07-28

G	ADD SECTION K-K/L-L: INSERT INSTALLATION TO SHEET 11 (ZN A5-11)	DB	14.08.20
F	REORGANIZED VIEWS AND REFORMATTED DRAWING TO CURRENTS STANDARDS; ADD CHAMFER IN SECTIONS A-A (ZN C7-10) & H-H (ZN B7-11)	RF	09.07.13
E	ADD HYSOL FIBER OPTION ON SHEET 11	CB	07.04.02
D	UPDATE DIMENSIONS	LE	07.02.22
C	REMOVED D0600-J00X LABELS	LE	08.12.13
B	UPDATED DWG TO MATCH PRODUCT ADDED D3188-1M/-2M/-3M/-5/-6/-7	CB	08.10.06
A	NEW ISSUE	CP	03.04.03
REV.	DESCRIPTION	BY	DATE
DESIGN	JB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	DB		
CHECKED	MA	DRAWING NO.	REV. G
MFG. APPR.	MA	D3188	SHEET 1 OF 11
APPROVED	MA	TITLE	SCALE
DE APPR.	MA	SPACEPOD BODY	NTS
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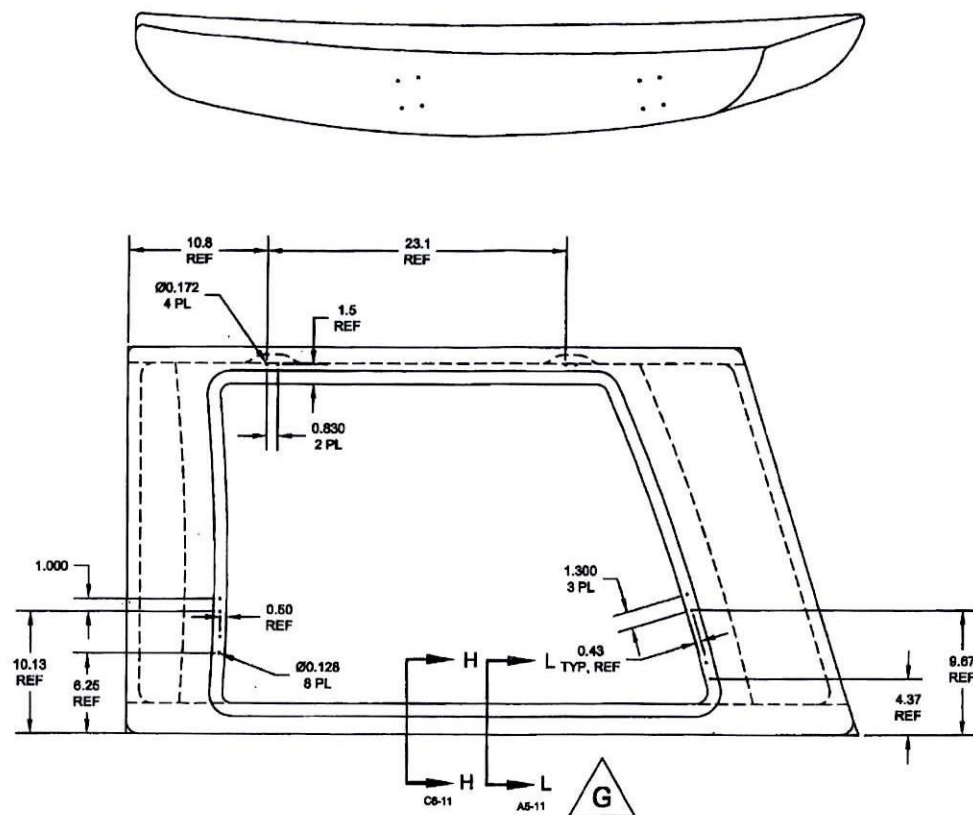
D3188-1 SPACEPOD BODY
MAKE FROM D3188-1M

NOTES:

- 1) REFERENCE DIMENSIONS REPRESENT HOLES WHICH ARE TRANSFER DRILLED FROM D3188-1 DOOR DURING ASSEMBLY
- 2) SEE SHEET #11 FOR SECTION VIEW

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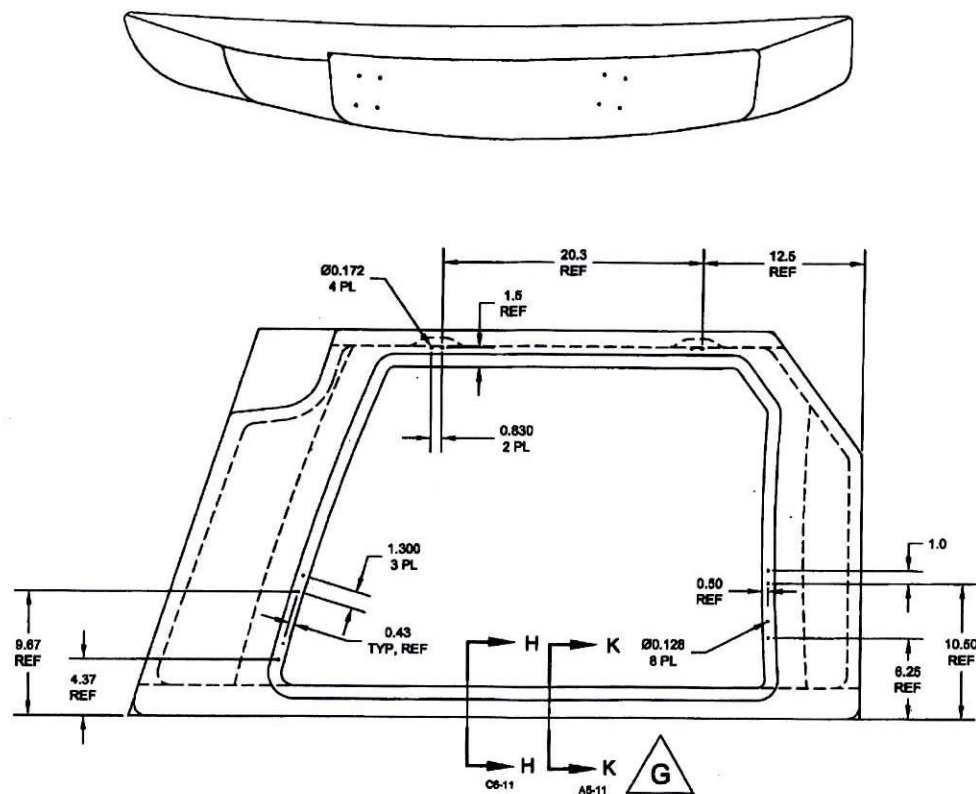
D3188-2 SPACEPOD BODY
MAKE FROM D3188-2M

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NOTES:

- 1) REFERENCE DIMENSIONS REPRESENT HOLES WHICH ARE TRANSFER DRILLED FROM D3188-2 DOOR DURING ASSEMBLY
- 2) SEE SHEET #11 FOR SECTION VIEW

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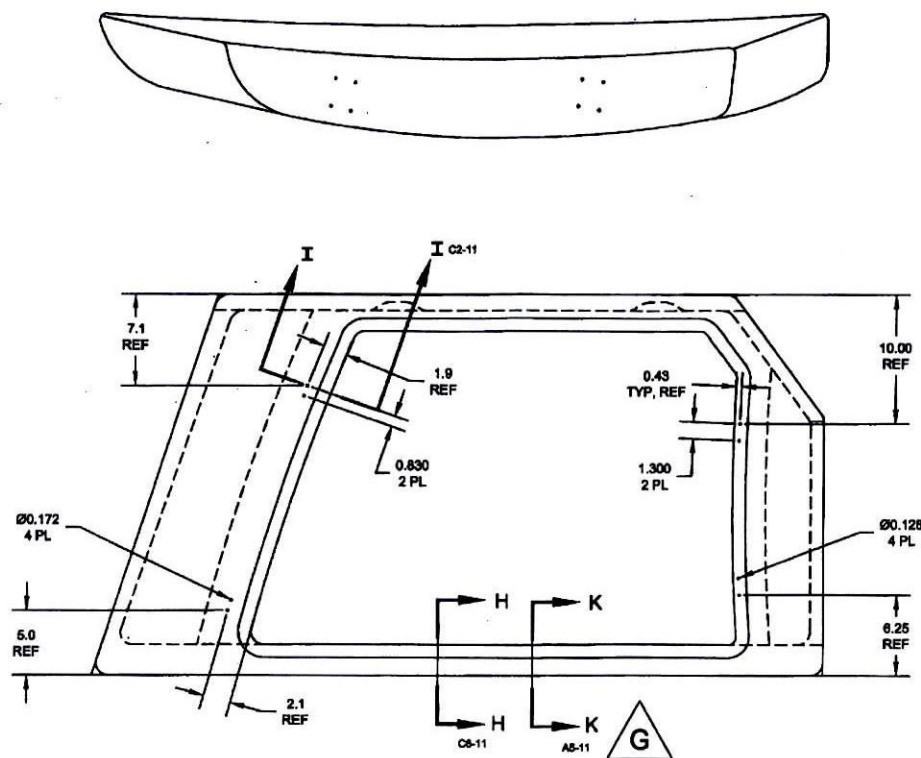
D3188-3 SPACEPOD BODY
MAKE FROM D3188-3M

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2014-07-28

NOTES:

- 1) REFERENCE DIMENSIONS REPRESENT HOLES WHICH ARE TRANSFER DRILLED FROM D3186-1 DOOR DURING ASSEMBLY
- 2) SEE SHEET #11 FOR SECTION VIEW

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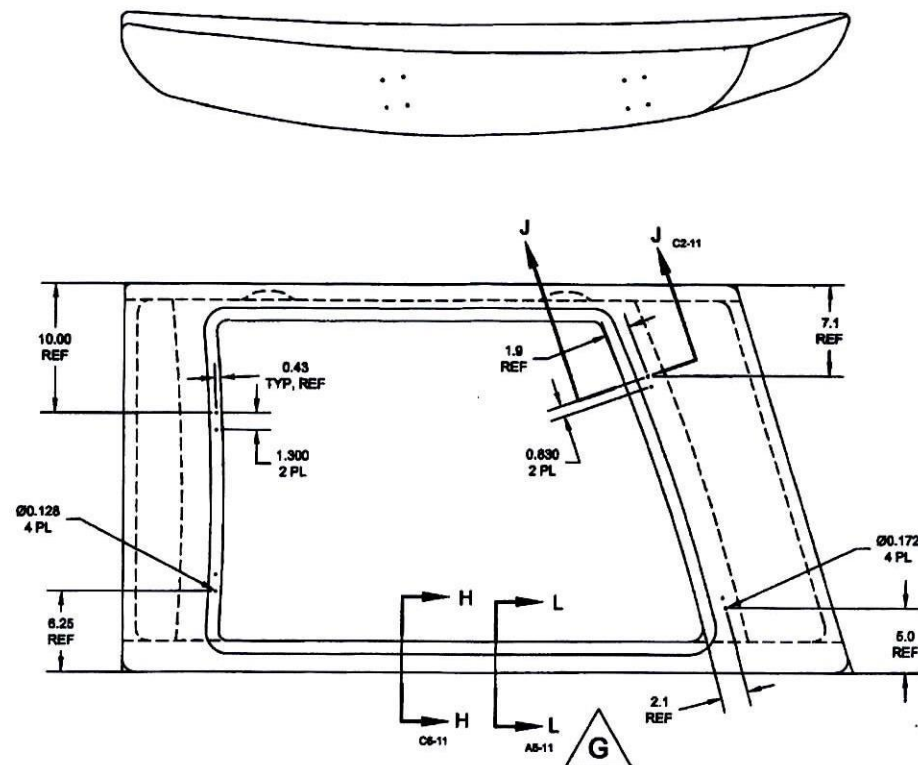
D3188-5 SPACEPOD BODY
MAKE FROM D3188-1M

NOTES:

- 1) REFERENCE DIMENSIONS REPRESENT HOLES WHICH ARE TRANSFER DRILLED FROM D3188-3 DOOR DURING ASSEMBLY
- 2) SEE SHEET #11 FOR SECTION VIEWS

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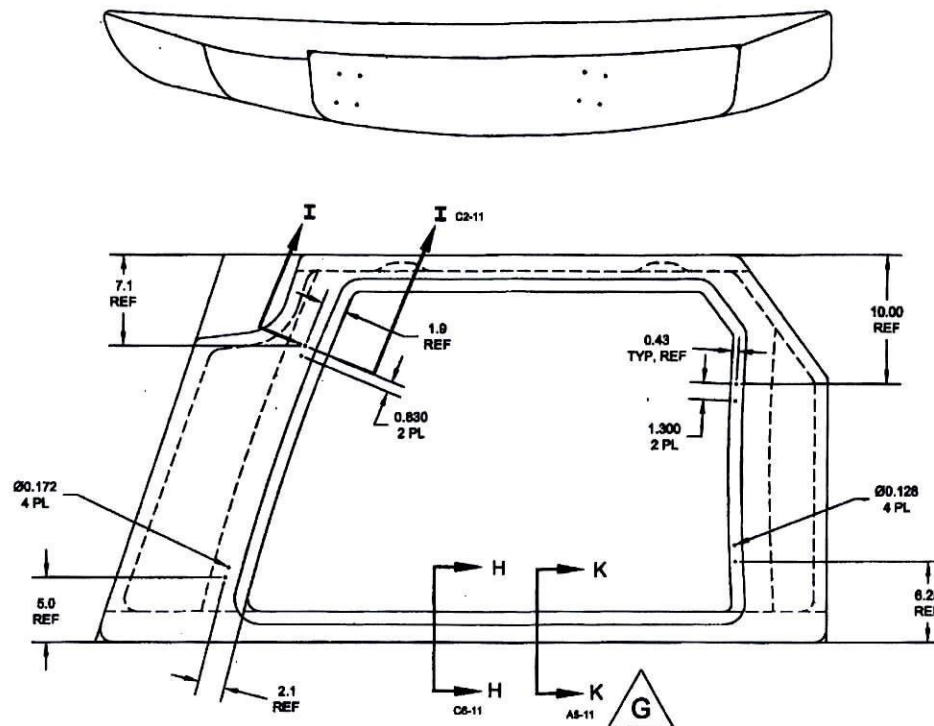
D3188-6 SPACEPOD BODY
MAKE FROM D3188-2M

NOTES:

- 1) REFERENCE DIMENSIONS REPRESENT HOLES WHICH ARE TRANSFER DRILLED FROM D3188-4 DOOR DURING ASSEMBLY
- 2) SEE SHEET #11 FOR SECTION VIEWS

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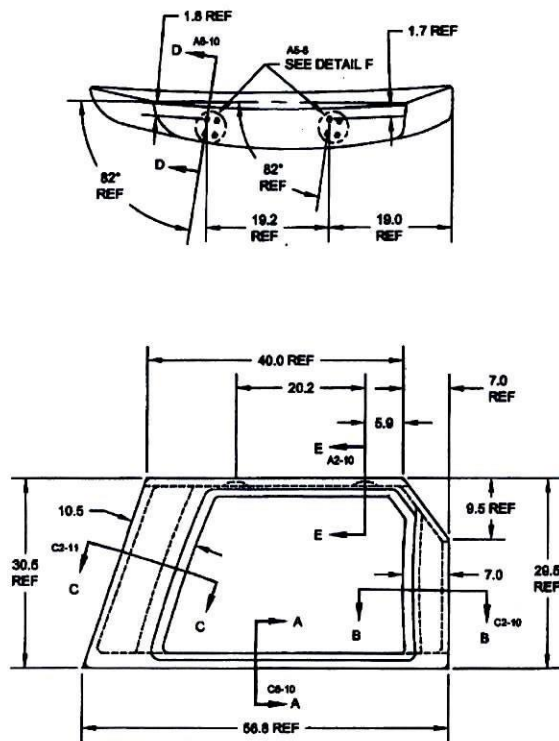
D3188-7 SPACEPOD BODY
MAKE FROM D3188-3M

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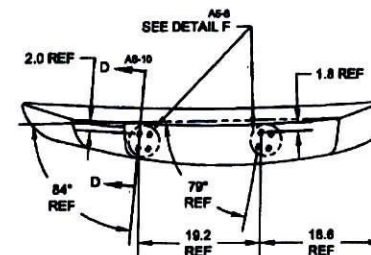
NOTE:

- 1) REFERENCE DIMENSIONS REPRESENT HOLES WHICH ARE TRANSFER DRILLED FROM D3186-3 DOOR DURING ASSEMBLY
- 2) SEE SHEET #11 FOR SECTION VIEWS

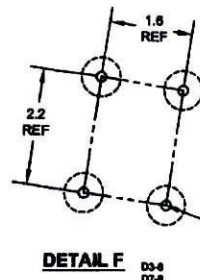
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D3188-1M SPACEPOD BODY



D3188-3M SPACEPOD BODY



DETAIL F

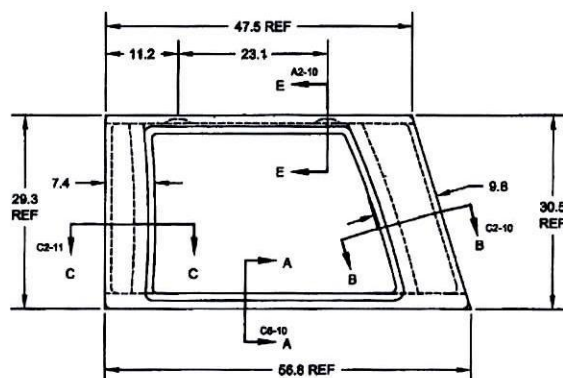
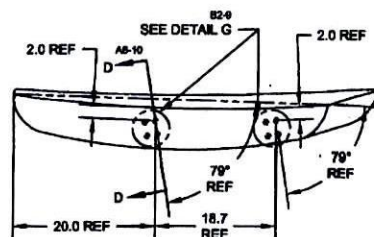
INSTALL
D2213 SPACER
8 PL
SEE SECTION D-D
A6-10

D3188-1M/-3M NOTES:

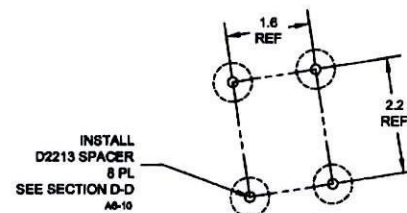
- 1) REFERENCE DIMENSIONS ARE FROM DT8003/DT8500 AND DT8501.
- 2) SEE SHEET #10 FOR SECTION VIEWS.

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D3186-2M SPACEPOD BODY



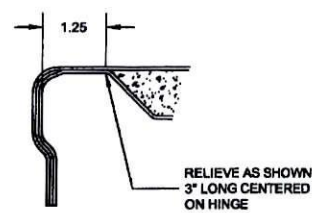
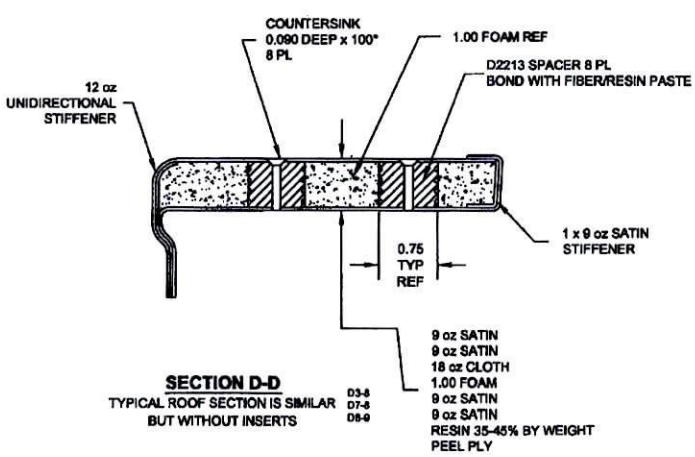
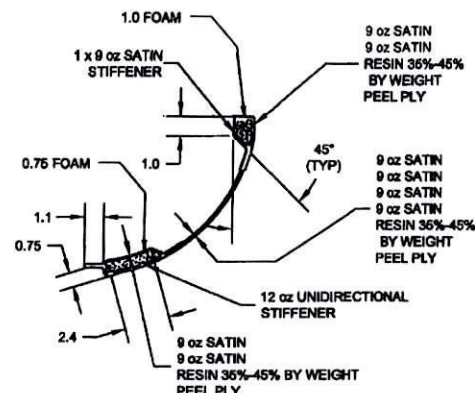
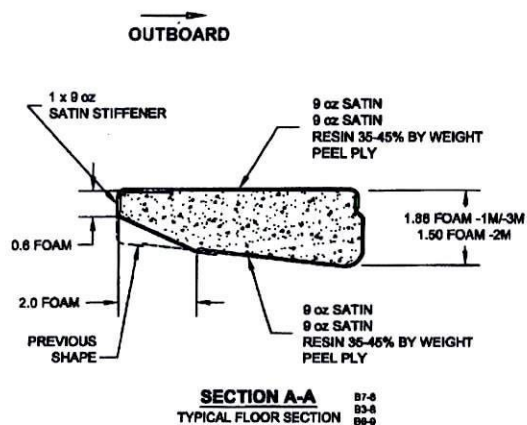
DETAIL G D6-9

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D3186-2M NOTES:

- 1) REFERENCE DIMENSIONS ARE FROM DT8004 AND DT8502.
- 2) SEE SHEET #10 FOR SECTION VIEWS.

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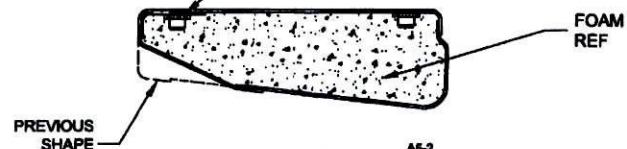


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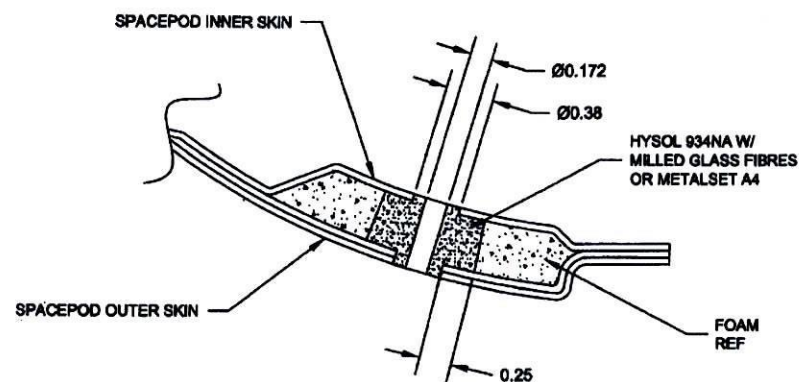
OUTBOARD

INSTALL AKS7-1032-130
INSERTS 20 PL
PER D3188-1T1 (D3188-1/3/5/7)
OR D3188-2T1 (D3188-2/4)
TO ALIGN WITH HOLES IN D3187-1/2 FLOORS



SECTION H-H
TYPICAL FLOOR SECTION

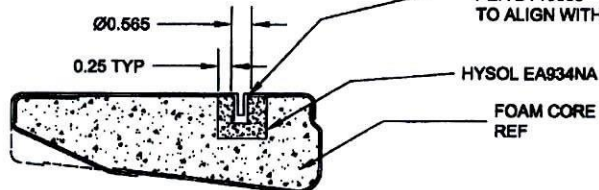
A5-2
A5-3
A5-4
A5-6
B5-6
B5-7



SECTION H
SECTION J-J OPPOSITE
4 PLACES PER POD

C5-5
C4-6
C5-7

OUTBOARD



10

INSTALL 80-005-2-10
INSERTS 7 PL
PER DT10068
TO ALIGN WITH HOLES IN D3187-1/2 FLOORS

SECTION K-K
SECTION L-L OPPOSITE
TYPICAL FLOOR SECTION

B4-2
B5-3
B4-4
B4-5
B4-6
B4-7

RELEASE
2014-07-28

DESIGN	JB	DART AEROSPACE LTD	
DRAWN	DB	HAWKESBURY, ONTARIO, CANADA	
CHECKED	DB	DRAWING NO.	REV. G
MFG. APPR.	DB	D3188	SHEET 11 OF 11
APPROVED	DB	TITLE	SCALE
DE APPR.	DB	SPACEPOD BODY	NTS
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